



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

4.5NR-45
Job Sheet 192523



Part No: 4.5NR-45

Job Qty: ~~20~~ pcs

Part Name: Latch Roller Pin



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 3/27/19

Job Tracking No:

Due Date: 4/5/19

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG 4.5NR-45 REV 4 IPP Rev. A 19.03.27 New issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup	Run	Workcenter / Supplier	Lead Time	
120	SL-154 - 1	10 pcs	4/5/19	4/5/19	0.00	0.83	SL-154 - 1		JB 19.03.28
130	QC 2	10 pcs	4/5/19	4/5/19	0.00	0.00	QC 2 - 1		
							QC 2 - 12		
							QC 2 - 14		
							QC 2 - 17		
							QC 2 - 19		
							QC 2 - 2		
							QC 2 - 20		
							QC 2 - 22		
							QC 2 - 23		
							QC 2 - 25		
							QC 2 - 32		
							QC 2 - 33		
							QC 2 - 35		
							QC 2 - 39		
							QC 2 - 4		
							QC 2 - 40		
							QC 2 - 44		
							QC 2 - 45		
							QC 2 - 48		
							QC 2 - 49		
							QC 2 - 50		
							QC 2 - 51		
							QC 2 - 52		
							QC 2 - 56		
							QC 2 - 57		
							QC 2 - 62		JB 19.03.28
							QC 2 - 63		
							QC 2 - 8		
							QC 2 - 66		
							QC 2 - 64		

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaero.com



Container No: S167315

Part: 4.5NR-45

Job No: 192523

Serial No/Batch: S167315

Revision: 4

Inspector:

Exp Date:

Instructions:

Date: 03/28/19

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140 QC 8	10 pcs	4/5/19	0.00 0.00	QC 2 - 65	
				QC 2 - 5	
				QC 8 - 12	
				QC 8 - 14	
				QC 8 - 17	
				QC 8 - 20	
				QC 8 - 25	
				QC 8 - 3	
				QC 8 - 32	
				QC 8 - 33	
				QC 8 - 35	
				QC 8 - 39	
				QC 8 - 4	
				QC 8 - 44	
				QC 8 - 45	
				QC 8 - 49	
				QC 8 - 58	
				QC 8 - 8	B. 19-03-29
				QC 8 - 9	
				QC 8 - 68	
				QC 8 - 67	
				QC 8 - 1 (A)	
				QC 8 - 47	
				QC 8 - 40	
				QC 8 - 52	
				QC 8 - 23	
150 Outsource - 1 - Heat Treat	10 pcs	4/5/19		MEI001-VC	04/01/2019 PL DP
180 Outsource - 15 - Nickel Plate	10 pcs	4/5/19		GRO002-VC	04/15/2019 PL DP
190 Packaging 2-2 - Receive - B4B	10 pcs	4/5/19	0.00 0.00	Packaging 2 - 1 - B4B	
				Packaging 2 - 2 - B4B	
				Packaging 2 - 3 - B4B	
				Packaging 2 - 5 - B4B	
				Packaging 2 - 4 - B4B	
				Packaging 2 - 6 - B4B	
				Packaging 2 - 7 - B4B	
				Packaging 2 - 8 - B4B	
				Packaging 2 - 9 - B4B	
				Packaging 2 - 10 - B4B	
				Packaging 2 - 11 - B4B	
				Packaging 2 - 12 - B4B	
				Packaging 2 - 13 - B4B	DP
				Packaging 2 - 14 - B4B	APR 26 2019
				Packaging 2 - 15 - B4B	
				Packaging 2 - 16 - B4B	
				Packaging 2 - 17 - B4B	
				Packaging 2 - 18 - B4B	
				Packaging 2 - 19 - B4B	
				Packaging 2 - 20 - B4B	
				Packaging 2 - 21 - B4B	
				Packaging 2 - 22 - B4B	
				Packaging 2 - 23 - B4B	
				Packaging 2 - 24 - B4B	
				Packaging 2 - 25 - B4B	
				Packaging 2 - 26 - B4B	
				Packaging 2 - 27 - B4B	
				Packaging 2 - 28 - B4B	
				Packaging 2 - 29 - B4B	
				Packaging 2 - 30 - B4B	
				Packaging 2 - 31 - B4B	

27 pcs

APR 12 2019

DP APR 26 2019

					Packaging 2 - 32 - B4B	
					Packaging 2 - 33 - B4B	
					Packaging 2 - 34 - B4B	
					Packaging 2 - 35 - B4B	
					Packaging 2 - 36 - B4B	
200 QC 6	10 pcs	4/5/19	0.00 0.00	QC 6 - 9	Apr 28 2019	DAS 40 9-89
				QC 6 - 68		
				QC 6 - 61		
210 Packaging 3-1 - Stock - B4B	10 pcs	4/5/19	0.00 0.00	Packaging 3 - 1 - B4B		
				Packaging 3 - 2 - B4B		
				Packaging 3 - 3 - B4B		
				Packaging 3 - 4 - B4B		
				Packaging 3 - 5 - B4B		
				Packaging 3 - 6 - B4B		
				Packaging 3 - 7 - B4B		DAS 28 9-89
				Packaging 3 - 8 - B4B		
				Packaging 3 - 9 - B4B		
				Packaging 3 - 10 - B4B		
				Packaging 3 - 11 - B4B		
				Packaging 3 - 12 - B4B		
				Packaging 3 - 13 - B4B		
				Packaging 3 - 14 - B4B		
				Packaging 3 - 15 - B4B		
				Packaging 3 - 16 - B4B		
				Packaging 3 - 17 - B4B		
				Packaging 3 - 18 - B4B		
				Packaging 3 - 19 - B4B		
				Packaging 3 - 20 - B4B		
				Packaging 3 - 21 - B4B		
				Packaging 3 - 22 - B4B		
				Packaging 3 - 23 - B4B		
				Packaging 3 - 24 - B4B		
				Packaging 3 - 25 - B4B		
				Packaging 3 - 26 - B4B		
				Packaging 3 - 27 - B4B		
				Packaging 3 - 28 - B4B		
				Packaging 3 - 29 - B4B		
				Packaging 3 - 30 - B4B		
				Packaging 3 - 31 - B4B		
				Packaging 3 - 32 - B4B		
				Packaging 3 - 33 - B4B		
				Packaging 3 - 34 - B4B		
				Packaging 3 - 35 - B4B		
				Packaging 3 - 36 - B4B		
220 QC 21 - SA	10 pcs	4/5/19	0.00 0.00	QC 21 - SA - 21		DAS
				QC 21 - SA - 70		21 MAY 02 2019
				QC 21 - SA - 53		9-89

Part Op 120 - 1-Machine as per folio FC718 FOLIO REV: AA DWG REV: 4 2-Deburr

Descriptions: 130 - QC2- Inspect parts off machine FAI/FAIB

140 - QC8- Inspect parts - second check

150 - 1--Issue P/O to Metcore ; P/O 043045 RC 50-55 2-Bead blast 3- Certificate of Conformity is required

NOTE DROP SHIP TO FINISHER Metcore to ship directly to Groupe Altech

180 - -Issue P/O to Groupe Altech: P/O 043205 -Nickel plate, QQ-N-290, Class 2, Grade E or F -NICKEL PLATE .0004 - .0006, BAKE AFTER PLATING. - Certificate of Conformity is required

190 - Receive & Inspect for Damage & Mat'l Certs

200 - QC6- All purchased or subcontracted products

210 - Identify as per dwg & Stock Location: _____

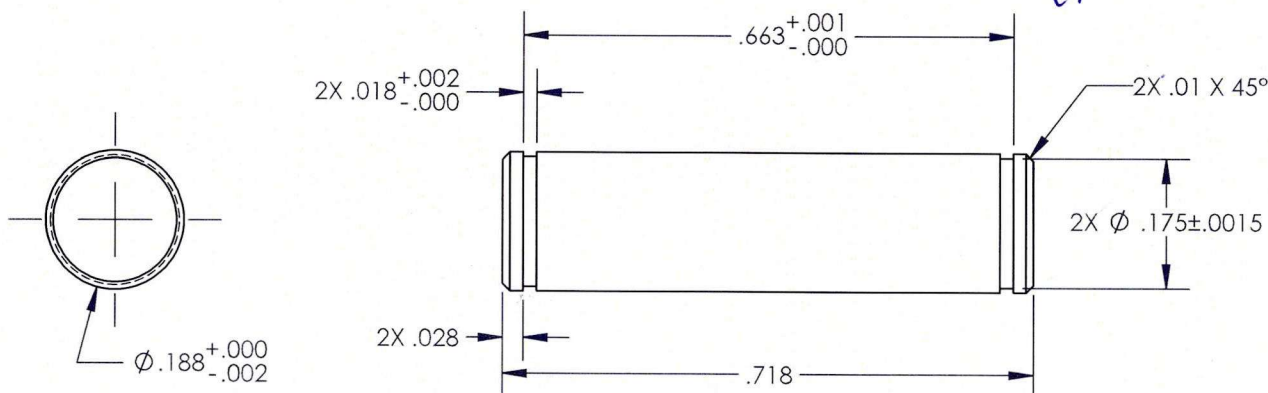
Job BOM				
Part / Item	Component Name	Quantity	Operation	Container
8893K178	Ø3/16 O1 Tool Steel Rod	.8000 ft (.08 ea)	120-SL-154 - 1	5144327
Job Allocations				
Operation	Component Part	Required	Inventory	Allocated
120-SL-154 - 1	8893K178	1	6	0
Part Specifications				
Specifications could not be found.				

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2		AS DRAWN BY CANAM.	7/16/2013	JAG	
3		ADDED TOLERANCE TO Ø.188 AND GROOVE DIAMETER & WIDTH. CH'D FINISH WAS YELLOW ZINC IS NICKEL PLATE .0004-.0006, BAKE AFTER PLATING PER R.W.	7/22/2013	CFS	RW
3A	14-0095	CH'D TITLE BLOCK WAS RED BARN IS DART. ADDED NOTE 2.	7/28/2014	DPD	RW
4	16-0105	UPDATED TO NEW STANDARD. CH'D MAT'L WAS A2 IS 01.	8/11/2016	DEW	SM

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 192523 415
1907-23



- NOTES:
1. NICKEL PLATE .0004 - .0006, BAKE AFTER PLATING.
2. BAG & LABEL WITH BATCH NUMBER.

DART AEROSPACE	
TITLE LATCH ROLLER PIN	
DWG NO. 4.5NR-45	REV 4
MAT'L 01 HEAT TREAT HRC 50-55 FINISH SEE NOTE 1 SPEC	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1 SURFACES = 125/	
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
DRAWN BY: CANAM	QA APPR: LINDSAY
CHECKED: DUERFELDT	APPROVED: MACKOVJAK
OPPS APPR: ANDERSON	
SCALE 4:1 DATE 8/15/1997 SHEET 1 OF 1	

ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS
			4.5NR-45	1	LATCH ROLLER PIN	01	

8893K178
888K207



Dart Aerospace Ltd.
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K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

PO043045



Supplier: MEI001-VC
Metcor Inc.
560 Boul. Arthur Sauve
Saint-Eustache
QC
J7R 5A8 Canada
Phone: 450 473 1884
Fax: 450 491 5498

Attention: Cloutier, Danielle

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: PO043045

PO Date: 4/1/19

Due Date: 4/5/19

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Phone:

Via: Ground

Pymt Terms: Net 30

Freight Terms:

Special Comments:

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	192523	4.5NR-45	Latch Roller Pin 1--Issue P/O to Metcore ; P/O _____ RC 50-55 2-Bead blast 3- Certificate of Conformity is required ***NOTE*** DROP SHIP TO FINISHER Metcore to ship directly to Groupe Altech Latch Roller Pin -Issue P/O to Groupe Altech: P/O _____ -Nickel plate, QQ-N-290, Class 2, Grade E or F -NICKEL PLATE .0004 - .0006, BAKE AFTER PLATING. - Certificate of Conformity is required	Firmed X27	-	4/5/19	27 pcs	0 pcs	27 pcs	\$11.48/pcs	\$309.96

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Line Item Note *** RUSH - RUSH - RUSH ***

Grand Total: \$309.96



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PURCHASE ORDER

PO043045



Order Notes

Procurement Quality Clauses

A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

A handwritten signature in black ink, likely belonging to Patrick Lussier, is written over the bottom right of the Order Notes section.

Plex 4/3/19 2:30 PM dart.Lussier.Patrick

METCOR INC.

560 BOUL. ARTHUR-SAUVÉ, ST-EUSTACHE, QC, J7R 5A8

Tél.: 450-473-1884

Télécopieur / Fax administration: 450-491-5498

Télécopieur / Fax production: 450 491-6454

Certificat de Conformité Détaillé

Detailed Certificate of Compliance

BON DE TRAVAIL order	CHARGEMENT load
335444	1

CLIENT / customer 215

DART AEROSPACE

1270 ABERDEEN

HAWKESBURY

ON K6A 1K7

LIVRÉ À / shipped to:

GROUP ALTECH

2455 ALPERN

ST LAURENT

QC H4S1N9

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COMMANDE DU CLIENT customer po	CLASSIFICATION PIECE part classification	MATÉRIEL material	MAÎTRE D'OEUVRE prime contractor	PROGRAM
43045	N/A	O1		
SPÉCIFICATIONS DU PROCÉDÉ processing specifications				
SEL HARDEN				
HARDEN AND TEMPER				
EXIGENCE / requirement	SPÉCIFICATIONS / specified	TESTS EXÉCUTÉS / performed	RÉSULTATS DE TESTS / results	
HARDNESS	50 - 55 HRC	5	51 - 53 HRC	
(915) MESURE EN HR15N = 85,9-86,9 HR15N				
QUANTITÉ quantity	POIDS weight	DESCRIPTION DES PIÈCES parts description		
27	1	4.5NR-45 (27) 4.5NR-45 JOB 192523 1 BOITE DE CARTON		

COMMENTAIRES / comments

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SALT HARDEN 1475F 20 MINS

SNAP TEMPER 400F 2:00 HRS

TEMPER 700F 2:00 HRS

Heat treatment (HT) was performed with equipment that meets the requirements of requested specification.

All HT operations were performed in compliance with the required HT specification and all verifications have been performed and documented. No unauthorized changes were performed in regards to the HT. We certify that the material was manufactured, sampled, tested and inspected in accordance with the material specification and the purchase order and was found to meet the requirements.

This document and any attached documents may contain confidential or proprietary information and may be subject to export control laws and regulations. If you are not the intended recipient, you are notified that any dissemination, copying of this e-mail and any attachments thereto or use of their contents by any means whatsoever is strictly prohibited. Unauthorized export or re-export is prohibited.

Le traitement thermique (TT) a été fait en utilisant des équipements en conformité avec la spécification demandée. Toutes les opérations de TT ont été faites en conformité avec les requis de la spécification demandée et toutes les vérifications et les tests demandés ont été faites et documentés. Aucun changement n'a été faite par rapport au TT. On certifie que le matériel a été fabriqué, échantillonné, testé et inspecté en accord avec les spécifications du matériel et le bon de commande et le matériel rencontre les exigences spécifiées.

Ce document et les documents qui lui sont joints peuvent contenir des informations confidentielles, être soumis aux

METCOR INC.

560 BOUL. ARTHUR-SAUVÉ, ST-EUSTACHE, QC, J7R 5A8

Tél.: 450-473-1884

Télécopieur / Fax administration: 450-491-5498

Télécopieur / Fax production: 450 491-6454

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Detailed Certificate of Compliance

BON DE TRAVAIL order	CHARGEMENT load
335444	1

CLIENT / customer 215

DART AEROSPACE

1270 ABERDEEN

HAWKESBURY

ON K6A 1K7

LIVRÉ À / shipped to:

GROUP ALTECH

2455 ALPERN

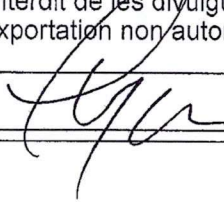
ST LAURENT

QC H4S1N9

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règlementations relatives au contrôle des exportations ou ayant un caractère privé. S'ils ne vous sont pas destinés, nous vous signalons qu'il est strictement interdit de les divulguer, de les reproduire ou d'en utiliser de quelque manière que ce soit le contenu. Toute exportation ou réexportation non autorisée est interdite.

APPROUVÉ par / Approved by:



DATE: 2019-04-11

Lucie Desmarais
QA Technician



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Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

PO043205



Supplier: GRO002-VC
Group Altech
2455 Halpern
St Laurent
QC
H4S 1N9 Canada
Phone: 514-335-3666
Fax: 514-335-3868

Attention: Grenon, Sylvie

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: PO043205

PO Date: 4/15/19

Due Date: 4/22/19

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Phone:

Via: Ground

Pynt Terms: Net 60

Freight Terms:

Special Comments:

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	192523	4.5NR-45	Latch Roller Pin -Issue P/O to Groupe Altech: P/O _____ -Nickel plate, QQ-N-290, Class 2, Grade E or F -NICKEL PLATE .0004 - .0006, BAKE AFTER PLATING. - Certificate of Conformity is required	Firmed	-	4/22/19	27 pcs	0 pcs	27 pcs	\$8.8888/pcs	\$240.00

Grand Total: \$240.00

Order Notes

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retension of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

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Plex 4/23/19 2:06 PM dart.Lussier.Patrick

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Certificat de Conformité / Certificate of Compliance



0 1 8 6 6 1 - 1

2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9
 Tel: 514-335-3666 Fax: 514-335-3868
 www.groupaltech.com

Bon de Livraison / Packing Slip

018661- 1

Livré à / Ship to

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 Tel.: 613-632-5200 Fax.:

Client / Customer:

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 BUYER:

Date expédition Ship date		Créé Par Generated By	Transport / No de Compte Courier / Acc. No.	Bon de commande Client Customer Purchase Order No.				
24-Apr-2019		SVETLANA DORZHIYEVA		PO043205				
#Ligne Line#	No. de Série / # Pièce Part Number / Line Item Details Job # / Ref #	Description pièce(s)	CATG. U/M	Comm. /Ordered	Exp/ Shipped	Qté NC/ NC Qty	Qté Scrap/	À venir/ Back Order
1	4.5NR-45 Rev.	4.5NR-45 01 -E-NIC STEEL 500 [E-NICKEL STEEL 500]	E-NICKEL-500 MIN-CHG	27	27	0	0	0

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Notes Additionnelles / Additional Notes

Epaisseur réelle
Actual Thickness

Inspecteur Qualité
Quality Inspector

Réçu par
Received By

Nous certifions que les pièces énumérées ci-dessus ont été traitées en conformité avec votre commande et vos spécifications et rencontrent les exigences.
 Notre responsabilité financière et légale ne sera pas supérieure au montant de la facture issue.

We hereby certify that the parts listed above have been process in accordance with your purchase order and specifications and are in conformance with your requirements.
 Our financial and legal responsibility will not be higher than the amount of invoice.